and a half from its broad pedicle. Its posterior portion includes the lobule and the anterior portion of the ear. Its superficial surface is covered with scales formed from a sero-purulent fluid that exudes from a slightly excoriated surface. A similar appearance is to be found in some forms of lepra. This tumour, in coming into contact with a neighbouring fibrous mass, has the under surface of its overlapping lobule ulcerated. The tumour situated below resembles, in shape and colour, the inferior surface of a liver. When its surface is touched, it shrivels between the fingers, and the touch has the semi-elastic feel of a fungus. Its lower border is sacculated, and discharges a yellowish-white gelatinous fluid from small puckered openings. Situated upon the right side of the jaw is a turtle-shaped tumour; its body rests upon the angle of the inferior maxillary, and its head, having two pea-like bodies in the place of the eyes, includes the lobe of the ear in its substance, and points in front of the aural appendage. Its length is $4\frac{7}{8}$ inches, and its breadth $4\frac{1}{4}$ inches. The hair of the whiskers is disarranged by the tumours. The apposition of the edges of these prominences with the subjacent skin, or with neighbouring protuberances, has given rise to abrasion of their surfaces. A portion of one of the tumours had suppurated, staining the linen with the discharge. When the sacculi, after having excited considerable pain, had given exit to their contents, they closed, as stated, with puckered cicatrices. The tumours have not encroached upon the cavity of the mouth, the mucous membrane of which is entirely healthy.

Upon the nape of the neck a tomato-shaped growth, looking as if it had burst in the centre from over-ripeness, now discharges a yellowish albuminous fluid. Tumours of this nature, according to Virchow, are developed from the corium, or sometimes take their origin from the panniculus adiposus. They may attain to a great size, having been known to weigh forty pounds. When they attain to an inconvenient size around the neck, they are subjected to surgical interference. Dr. Maury of Philadelphia removed from the neck of a coloured man one weighing nine pounds. But in addition to those around the neck, the dorsal surface of the body, as well as the shoulders and arms, presented the singular appearance as if masses of fungi had been attached to the surface of the skin. These excrescences are all of a lobulated or convoluted appearance, possessing a slight degree of mobility and elasticity. The largest of these tumours upon the back is $9\frac{1}{2}$ inches in length and $4\frac{1}{2}$ inches in width; the smallest in size measures $2\frac{3}{4}$ inches in length and 2 inches in width. One of these excrescences, having a depressed centre, and consisting of twenty-three lobules, measures $5\frac{1}{2}$ inches in length, $2\frac{1}{2}$ inches in width, with a thickness of three-quarters of an inch. The tumours situated upon the scapula, on each side of the spine, have a distance from each other of half an inch. These morbid enlargements have a tendency to overlap one another, rather than to root themselves by prolongations in the skin. Upon section, they present a whitish, homogeneous, gristle-like appearance, and the knife is resisted in its passage through the dense, firm, fibro-cartilaginous-like structure. The blood-vessels have an irregular network arrangement upon the surface, and may give rise to severe hæmorrhage when the tumours are removed. Although two or three of these tumours, when irritated, have discharged a yellowish-white albuminous fluid, and resembled fibroma somewhat in appearance, yet the soft purselike appendages are unlike the soft purselike appendages to the skin, having a soft spongy consistence, and composed of young gelatinous connective tissue, characteristic of true molluscum fibrosum; nor can they be easily separated from the pedicle or enucleated from their attachments in the superficial layer of the derma. Besides, James Bell is in perfect health; and, although in such a disease we may suspect some degenerative changes in the substance of the spinal cord, and, as in his case, a greater sensibility on one side than another, that will lead undoubtedly in time to a greater difference in the supply of nervous vigour to the two sides, still he does not manifest those general nutritive disturbances which, in fibroma, often cause death by marasmus or pyæmia. The disease is a localised evidence of disorder of the peripheral nerves, accompanying the blood-vessels of the corium. In the *post mortem* examination of persons who have died of leprosy, the nerves are found to be thickened by a fibrous structure, and their terminal branches atrophied and pearly in aspect, while in the anæsthetic variety the nervous centres in the cranial and vertebral cavities are often found diseased. Yet it is somewhat singular that the microscope seldom reveals the elements of nerve-structure in the tumours attending hypertrophic cutaneous diseases. Even in a case of very painful neuroma, reported by Dr. Dühring of Philadelphia, the microscope failed to discover, in the rounded hard nodules, that were often the seat of the most intolerable pain, the presence of any nerve-fibres. In all similar affections of the skin where peripheral nerves become affected, as in our patient, the morbid nervous condition is conveyed, to a greater or less extent, along the nerves to the central nervous system, and gives rise, not merely in some cases to intercurrent nervous disorders, but to

that characteristic mental condition observed in many cases of hypertrophic disease of the skin.

By the persistent use for several years of small doses of arsenic, not only its sedative influence would be exercised upon the peripheral cutaneous nerves, and, by allaying this extreme sensitiveness to external impressions, remove the causation of the disease, but it might, to some extent, restore healthy nervous functions, by assisting in the reformation of lost nervous structure and the removal of sclerosis of the skin and nervous centres, which seem to form after nervous elements have disappeared. Local measures, as pressure, etc., may at the same time be resorted to for removing these dermal tumours. Mr. George Pollock, of St. George's Hospital, London, has published in the *Lancet*, of March 22nd, 1873, the details of a case of molluscum fibrosum, which appears to have some of the characters distinguishing the case of James Bell.

The woman, aged 33, who had been afflicted since childhood, was in a very low state of health when admitted to the hospital. There were over one hundred tumours of various sizes in different parts of the body. Some were solitary, some were clustered, some with broad base, some pedunculated, whilst others were as small as a split pea. The chief growth extended from the right side of the neck by a pointed extremity to the upper margin of the right mamma. It consisted of a long, thick, and broad pendulous flap of skin about eighteen inches in length. Its anterior surface was thrown into several folds, which give it somewhat the appearance of coils of intestine. One large one, attached to the back of the head, was of the size of a small melon. The microscope, according to Dr. Whipple, showed that the growth was due to excessive hypertrophy of the connective tissue, and partly to abundant cell-growth, occupying interspaces between the bands of fibrous tissue.

The microscopical drawing (Fig. 3) accompanying this essay will show the havoc made by the disease in the dermal tissue. The main feature presented is hypertrophy of the cutis vera, as well as of the deeper pigmentary layer of the epidermis. The connective tissue of which the cutis vera is composed is of a low type, consisting of wavy interlaced bands of fibres, enclosing here and there within its meshes patches of fibroplastic matter, consisting of closely packed, minute, angular, actively growing corpuscles, with faint striæ passing amongst them. The hairs and hair-follicles appear quite normal, though surrounded by a layer of the above mentioned fibro-plastic material. The pigment-layer is very large and abundant, sending in anastomosing processes to the cutis vera.

James Bell's disease is remarkable from the fact that it embraces some of the characters of both cheloid and molluscum fibrosum. If the origin of those cases occurring in England, now called molluscum fibrosum, were minutely investigated, it is possible, from the nature of the microscopical examination of Mr. George Pollock's case, and the fact that molluscum fibrosum is a disease peculiar to warm countries, that they would follow our example, and call their cases cheloid, especially as this disease is more likely to prevail in temperate climates.

Fig. 3.

THE ALLEGED OCCURRENCE OF PURPURA IN CHILDREN.

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REFERRING to Dr. Lewis's communication to this JOURNAL under the title "Notes on Purpura," I had my attention drawn by Dr. Cameron six months ago to the investigations that were being made by Dr. Lewis into the nature of the maculated condition of the skin giving rise to the abnormality of which he treats, and I was induced to devote much time and attention amongst our in- and out-patients to the matter, with a

view of ascertaining to what real origin the affection owed its presence; and I now feel no hesitation in attributing the symptoms in question to a local rather than a constitutional cause. For this malady, which has given rise to the supposition of the prevalence of purpura amongst the poor children of this town, met with in the form of small dark-red circular spots, of more or less uniform tint, varying in size from about the one-ninth to the one-twenty-fourth or even less of an inch in diameter, and found most frequently and in greatest abundance on the integument in front of the body, neck, and upper arms, has, besides the weight of its hitherto generally recognised and undisputed claim to an origin in flea-bites, many peculiarities which entirely preclude the idea of a different source.

According to the hypothesis advanced by Dr. Lewis, but contrary to universal experience of purpura, the chests of young children, healthy and unhealthy indiscriminately, are found more frequently marked than are the legs of the aged. Thus most unaccountably conjoined with its imputed nature, do we find that, in the choice of sites, preference is given to the warmest and most delicate portions of the surface; the lower limbs, the parts most dependent and furthest removed from the centre of the circulation, being discarded almost invariably.

Again, the duration of the disease shows a wide gap to exist between it and purpura. In the latter case, weeks and even months are known to pass with a continuance of the cutaneous discoloration; while, as the result of altered topical states, as through admission into a clean ward in cases of flea-bite, the spots soon fade, and are usually absent on the fourth day—to quickly reappear, however, on discharge and consequent re-exposure to the previously existing conditions. In all the numerous instances where I have had opportunities for observation, this rule has held good.

Further, I am enabled to state that, during my experience, no other besides the cutaneous resemblance to a purpuric symptom was present in a single instance; there was no tardiness in the reunion of fractures or healing of wounds; no unusual hæmorrhage either from them or from the mucous membrane. And another point of no inconsiderable value in establishing a correct theory, is indicated by the fact that these spots are much more rife during the hot summer than during the winter months.

Moreover, it will be allowed that, without a knowledge, gained through experiments with insects themselves, of the influence exercised on the duration and character of the resulting petechiæ by the condition of the skin, delicate or otherwise, the nature of the bite, severe or the reverse, the state of the patient, healthy or unhealthy, and the vitality of the part, errors such as appear in Dr. Lewis's statements respecting flea-bites are not surprising. For, on the application of a flea to almost any part of the cutaneous surface, not omitting the face and eyelids, in a short time, as the result of the bite or bites, one or more circular blushes of a light red colour are left, having at the centre a spot of a much darker tint and of the size of a pin's head, with occasionally the actual site of the puncture indicated by a still darker point in its middle. In twelve hours, or less, the blush will have faded, leaving the central dot as the only indication. This will, however, have assumed the appearance of an ordinary spot of ecchymosis visible through a transparent layer of cuticle, and will remain for an uncertain period, varying from one to six or eight days, the duration being influenced, as above stated, by the healthy or unhealthy condition of the patient, the vitality of the part, and the energy displayed by the insect; for, when a flea feeds undisturbed from one or two punctures, the resulting marks are much more permanent than when, owing to disturbance or other cause, numerous incisions are made during one meal.

In support of the above assertions, I tender reports of the following cases, a few out of between thirty and forty which I have taken.

CASE I.—Ann Jane McC., aged 14, a stout and healthy girl, was admitted on February 9th under Dr. Wollaston, for a scalded thigh. Numerous spots of a dark red colour were observed on her neck, and on the front of the chest, the abdomen, thighs, and arms. Two circles, enclosing each from fifteen to twenty spots, were made with nitrate of silver. On February 10th, of those within the circles, one-third had lost the red tint and become of a brownish yellow colour. On the 11th, only six retained a red colour; all the rest were as more or less faded brownish yellow stains. On the 13th, the spots were absent, together with those on the rest of the surface. On February 17th, a flea was applied to the integument of the back, leaving three areolæ with central dark red spots, two of which gave no indication of a puncture even with the aid of a lens. Next day, each appeared as a dark red spot, without an areola. On the 19th, there was no apparent change. Next day, the spots had somewhat faded; on the 21st, they were yellowish brown dots; and on the 22nd, were absent.

CASE II.—Herman S., aged 8, a delicate boy, of fair complexion, was admitted on December 5th, 1873, under Dr. Carter, for convul-

sions. A flea was applied to the chest on the evening of admission; it left a mark similar to those described above. On the 6th, the areola was absent; the spot was dark red. On the 7th, there was no apparent change. Next day, the spot appeared as a brownish stain; and on the 9th, it was absent. Another application was made on the evening of the 8th, resulting in the appearance of nine marks; only seven, however, of these were visible next morning. They passed through the same stages as the above, and were wanting on February 12th.

CASE III.—Mary Ann K., aged 19, of well developed frame, healthy appearance, and fair complexion, was admitted on February 9th under Dr. Wollaston, suffering from fracture of her clavicle and much bruising of her shoulder. Numerous spots were observed on her neck. Two patches, containing each from twenty to thirty, were ringed by a stick of nitrate of silver. On the 10th, a third had lost the red tint; the rest were unchanged. Next day, the majority were yellowish; many were absent. On the 12th, all were much faded; a few remained still reddish. Next day, a very few were observed, and these were of a yellowish brown colour.

CASE IV.—Charles McA., aged 40, of strong well developed frame, was admitted on February 9th under Dr. Carter, suffering from double pneumonia in the second stage. A great number of small dark red spots were present on the whole of the anterior surface of the body, arms, and thighs. On the 10th, some were a little faded; others, the most numerous, were unchanged. On the 11th, the red colour was rapidly disappearing; a large number appeared as brownish stains. He died on the 12th, at 11.45 P.M. Not more than twenty spots out of the many present on his admission were observed on the body.

CASE V.—James McK., aged 7, a healthy well grown boy, was admitted under Dr. Cameron, for hoarseness of long standing, on February 10th. Fleas were applied to the chest on the same day; they left eleven marks, which retained the red colour for three days, and were visible as brownish marks for three days longer. On the evening of February 12th, an application was made to the right upper eyelid, with the result of producing four well marked flea-bites, which retained a red colour for four days, and for two longer appeared as brownish dots.

CASE VI.—Richard B., aged 10, a healthy strong boy, attending school, and taking his meals at home, was admitted on November 9th, 1873, under Dr. Wollaston, for a severe wound of the face. The spots, present in large numbers in the usual sites, and similar to those already described, observed on his admission, were absent on November 12th. Having been discharged with a natural skin, free from spots, on November 19th, he presented himself again in the out-patient room on the 29th, as thickly studded with spots as on the date of his admission.

CASE VII.—Thomas H. R., aged 10, a very healthy, stout, well grown boy, was admitted on March 23rd, under the care of Mr. Hamilton, for a severe wound of the scalp. Very numerous spots, similar to those already described, were found on almost every part of his skin, including the face, eyelids, margin of the scalp, and dorsal aspect of the feet and hands. They faded in the following order. On the 26th, the feet, thighs, hands, arms, face, and eyelids, were free from spots; the front of the chest, neck, and abdomen, showed about one-third the number of dots present on his admission. On the 27th, his skin was spotless.

SURGICAL MEMORANDA.

ATRESIA VAGINÆ.

IN the JOURNAL of February 28th, is reported a case of atresia vaginæ, occurring in the practice of Dr. Greenhalgh at St. Bartholomew's Hospital, but actually treated by Mr. Thomas Smith and Dr. Hope, the latter of whom appends some clinical observations on the subject.

This malformation, common enough in the female infant, must have been seen frequently by most surgeons and obstetricians; and, in its usual form, is easily remedied, the membrane which occludes the vagina being usually thin and easily lacerable, when put upon the stretch between the left forefinger and thumb of the operator and pressed against by the blunt end of a probe, or a bodkin, or any similar instrument. Under this proceeding, it splits longitudinally, leaving the mouth of the vagina patent, and there is little liability to any reunion of the edges. The case, as is well known, becomes much more serious in the adult female, not because the canal is less easily restored by operation, but by reason of the secondary evils that ensue upon even the simplest form of it, as, for instance, the mere puncture of the hymen with a lancet. I do not think the case cited by Dr. Hope, in support of this well-known fact, is quite to the point. It is doubtful, at least, whether the pyæmia of which this girl died was not due rather to the ulceration of the intestine, and that ulceration wholly independent of